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10/772,273

02/06/2004

Carol I. Keith-Wolfe

KEITH-WOLFE

4452

7590

12/29/2005

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EXAMINER

MAY, ROBERT J

ART UNIT

PAPER NUMBER

2875

DATE MAILED: 12/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/772,273

Applicant(s)

KEITH-WOLFE, CAROL I.

Examiner

Robert May

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2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-61 is/are pending in the application.
- 4a) Of the above claim(s) 20 and 50 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-12, 14-19, 21-24, 27-30, 37-47, 51-54, 56 and 58-60 is/are rejected.
- 7) ☒ Claim(s) 6, 13, 25-26, 31-36, 48-49, 55, 57 and 61 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Objections***

Claim 42 is objected to because of the following informalities: a misspelling on line 4 after "having".

Claim 52, the word comprising is misspelled.

Claim 55 is objected to because word such as --having a--should be inserted after "and" on the 2<sup>nd</sup> line.

Claim 56 is objected to because the office does not comprehend how a lighting apparatus structure can be both a piece of furniture and a sidewalk.

Appropriate correction is required.

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. The concave and convex surface of the front surface as recited in Claims 15-16 respectively must be shown or the feature(s) canceled from the claim(s). The material applied to the front surface to form lettering as recited in Claim 22 must be shown or the features cancelled from the claims. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure

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number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

There is no description of the lens panel being jewel cut as recited in Claim 2.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 45-46 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 45 recites an explosive environment and the specification fails to provide any description on what an explosive environment is that the Claim is referring to. Claim 46 recites the light distribution device as a device for regulating temperature, however in the specification on page 8 describes the light distribution device as not generating any heat or electricity, but the Patent Office fails to see how this regulates the temperature of the surroundings.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3,5,7-9, 11-12,14,17-19,23,27-28,30, 54, are rejected under 35 U.S.C. 102(b) as being anticipated by Davenport (US Pat 5,101,325).

Regarding Claims 1, 14, 27, 42, 51, & 52, Davenport discloses in Figures 2 & 6, a device for uniform illumination of large thin surfaces for automobile applications

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having two panels (32) having a geometric base (34), with a rear surface extending outwardly in opposing relationship from the edge (33) which inclines from the central edge (33) to the outer edge of the front surface (34) the and a flat front surface (34) which extends outwardly in opposing relationship from the central edge (33) of the base and having two recesses for accommodating a light guide member or light cartridge (24) adjacent to the base.

Regarding Claim 3, Davenport discloses in Figure 5, the base as being rectangular comprising the panels 34 bounded by the central edge 33 and the outer edges (not referenced).

Regarding Claims 2, 5, &, 7-8, Davenport discloses the bottom face 32 as having a specular or mirror like reflective coating (Col 3, Lines 12-15) and roughened (Col 4, Lines 35-36) or can alternatively be grooved (Col 5, Lines 38-40). No patentable weight is given to the manner (i.e. jewel cut, carved, granulated, etc.) at which the front surface is roughened, textured or formed.

Regarding Claim 9, & 11-12, Davenport discloses the lighting means fiber optic where an external means 16 applies optical energy or light to the optical fibers or cartridges that are inserted into the panels (Col 2, Lines 62-66).

Regarding Claims 17-19, Davenport discloses the front surface as having a light scattering feature made by scratching, grooving or coating the front surface 18 (Col 3, Lines 43-45) which is considered equivalent to the structure achieved by carving, texturing or etching as Claimed.

Regarding Claims 23, Davenport discloses the front surface as having a material coated on the front surface to the better scatter the light (Col 3, Lines 43-47).

Regarding Claim 28, Davenport discloses in Figure 6, the base as two panels, which incline from the central edge (33) and being at an angle relative to each other at (33).

Regarding Claim 30, the office construes the term "light pipe" to mean a fiber optic means for applying light the optical fibers, therefore Davenport reads on Claim 30 (Col 2, Lines 62-66).

Regarding Claim 54, Davenport discloses the light structure discloses as being particularly suited for automobiles (Col 1, Lines 11-12).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 15-16, 22, 43, & 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davenport as applied to claim 1 above, and further in view of Baba (US Pat 4,729,185).

Regarding Claims 22 & 47, Davenport discloses all of the claimed elements recited in Claim 1 except for a material applied to the front surface that forms letters. However, Baba discloses in Figure 6 a display panel that is wedge shaped with a light source and a front surface that has information 316 so that it can display information. Therefore, it would be obvious to one of ordinary skill to modify the front surface of the lighting apparatus of Davenport by applied indicia or insignia of Baba so that the lighting apparatus can display information and be used as a sign.

Regarding Claims 15-16 & 43, Baba discloses in Figure 4, the lens 116 and guiding member of the display panel as being flexible and able to be formed into an arcuate or curved manner so that it conforms to the radiused structure of display panels for vehicles and airplanes (Col 2, Lines 25-30 & Col 3, Lines 24-28). Therefore, it is obvious to one of ordinary skill in the art to modify the lens of Davenport with the flexible lens of Baba which is able to be formed into an arcuate, convex, and furthermore a concave shape not explicitly disclosed by Baba, so that it can conform to various structural radiuses such as display panels for automobiles and airplanes.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Davenport as applied to claim 1 above, and further in view of Baliozian (US Pat



4,428,030). Davenport discloses all of the claimed elements recited in Claim 1 except for a triangular shaped geometric base as recited in Claim 4. However, Baliozian discloses a modular light diffusing or reflecting plastic panel in Figure 1 with triangular shaped panes which allow the diffusing panes of Baliozian to be shaped into a variety of geometric shapes such as igloos which allow the lighting device be multidirectional (Col 4, Lines 4-7). Therefore, it would be obvious to one to modify base structure of the base of Davenport with the triangular paneled structure of Baliozian so that the lens structure can be a multidirectional light source.

Claims 10 & 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davenport as applied to claim 1 above, and further in view of Reynolds (US Pat 4,257,084). Reynolds discloses in Figure 2 a display device with an LED, which receives electric power from an external means and a hollowed portion 1 in which the LED resides. LEDs are generally known to be a compact energy efficient light source that has adequate illumination characteristics, which could replace the fiber optic light cartridges of Davenport. Therefore, it would be obvious to one of ordinary skill in the art to exchange the light cartridges of Davenport with the LEDs of Reynolds because they are power efficient and compact in size.

Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over Davenport as applied to Claim 1 above, and further in view of Robbins (US Pat 4,782,430). While Davenport does not disclose the light apparatus as being used

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underwater, Robbins discloses a light conduit used in a swimming pool, which keeps the electrical portion of the apparatus remote from the water so as to avoid electrocution. Therefore, it would be obvious to one of ordinary skill to use the lighting apparatus of Davenport in a swimming pool in order to illuminate a pool and avoid electrocution.

Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Davenport as applied to Claim 1 above, and further in view of Brosnan (US Pat 5,488,696). Davenport fails to disclose the light apparatus as being used in an explosive environment; however, Brosnan discloses a fiber optic light system used in hazardous or flammable situations where the electrical source of light is kept remote from the hazardous surroundings to avoid explosions. Therefore it would be obvious to one of ordinary skill in the art to use the lighting apparatus of Davenport in an explosive environment in order to keep the electrical light source remote from the hazardous explosive environment in which the panels reside.

Claim 53 is rejected under 35 U.S.C. 103(a) as being unpatentable over Davenport as applied to Claim 1 above, and further in view of Krent (US Pat 4,843,524). Davenport fails to disclose the lighting apparatus as being used as an piece of furniture, however, Krent discloses in Figures 11, 11a, & 11b, a fiber optic lighting means for illuminating furniture as decoration. Therefore, it would be obvious to one of ordinary skill to use the lighting apparatus of Davenport as an article of furniture as a decoration.

Claims 40-41, & 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davenport as applied to Claims 1 & 53 respectively above, and further in view of Sanford (US Pat 6,082,886). While Davenport fails to disclose the lighting apparatus as being used to form a sidewalk or road, Sanford discloses a fiber optic light system being used for incorporating light into paved or stepping surfaces to provide unique surface lighting while maintaining the solid construction (Col 2, Lines 30-33). Therefore, it would be obvious to one of ordinary skill to modify the lighting apparatus of Davenport by using it as a paved surface for sidewalks or roads to provide a unique surface lighting while maintaining the solid construction.

Claims 37-39, & 58-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davenport as applied to Claims 1 & 52 above respectively, and further in view of Zelan (US Pat 5,013,109). While davenport fails to disclose the light apparatus as being used for an interior or exterior wall, ceiling or floor panels, however Zelan discloses a fiber optic light system for use in ceiling and walls panels for decorative effect (Col 1, Lines 8-10). Therefore, it would be obvious to one of ordinary skill to use the lighting apparatus of Davenport as a ceiling, wall or floor component for decorative effect as taught by Zelan.

***Allowable Subject Matter***

Claims 6,13,25-26,31-36,48-49,55,57 & 61 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding Claim 6, the prior art does not teach or suggest a lighting apparatus as recited in Claim 1 where the rear surface is darkened.

Regarding Claim 13, the prior art does not teach or suggest a lighting apparatus as recited in Claim 1 having a means for controlling the amount of infrared radiation emitted by the light panels.

Regarding Claims 25, 55, 57 & 61 the closest prior art does not teach a lighting apparatus as recited in Claims 1, 52, or 53 having a hollow portion filled with fluid or means of passing fluid said through panel.

Regarding Claim 26, the closest prior art does not teach a lighting apparatus as recited in Claim 1 having a means for projecting television-like signals onto said front surface of said light panel.

Regarding Claim 31, the closest prior art does not teach a lighting apparatus as recited in Claim 9 having a laser delivering energy to the light cartridge.

Regarding Claims 32-36,48-49 the closest prior art does not teach a lighting apparatus as recited in Claim 1 wherein the light cartridge includes a light modifying means.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert May whose telephone number is (571) 272-5919. The examiner can normally be reached between 9 am– 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax number for the organization where this application or proceeding is assigned is (571) 273-8300 for all communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval PAIR system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

12/15/2005

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